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10/541,003	09/28/2005	Hedser Van Brug	294-220 PCT/US	9045
23869 7590 10/08/2008 HOFFMANN & BARON, LLP 6900 JERICHO TURNPIKE SYOSSET, NY 11791				
EXAMINER ELEY, TIMOTHY V				
ART UNIT		PAPER NUMBER		
3724				
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10/08/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/541,003

**Applicant(s)**

VAN BRUG ET AL.

**Examiner**

Timothy V. Eley

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 15-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 28-34 is/are rejected.
- 7) ☒ Claim(s) 1 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Objections***

1. Claims 1 and 9 are objected to because of the following informalities:

- a. "surfaces" (claim 1, line 4) should be --surface--.
- b. "an" (claim 9, line 1) should be changed to --a--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- c. "the further element" (claim 9, lines 6 and 7) lacks proper antecedent basis since it was not properly earlier referred to.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,2,10-12,28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Tinker (6,301,009).

- a. Tinker discloses an apparatus for forming or working optical objects comprising a working device, at least one measuring device (including 26) and a control device, the working

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device being adapted to form a surface of the optical object by machining or abrading, the at least one measuring device is adapted to measure changes in form and/or surface roughness of the surface during the surface being formed, the measuring device being further adapted to provide measuring data to the control device, the control device being adapted to control the working device on the basis of the measuring data. See figure 3; column 5, lines 50-end; and column 9, lines 38-end.

b. Regarding claims 2, 28, and 29, the measuring device is designed for measuring the changes in form with the aid of light beams, and for measuring changes in roughness. See column 8, lines 44-57.

c. Regarding claims 10 and 11, inherently the measuring device is insulated from vibrations, since accurate measurements cannot be taken if the light is not stable.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tinker(6,301,009).

a. Tinker is explained above. Tinker does not specifically disclose the measuring device being provided, at least partly, on

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a second arm(claim 13) and the measuring device using scatterometry. However, the measuring device is mounted would have been obvious to one having ordinary skill in the art at the time the invention was made, since applied has not disclosed that the use of an arm provides any stated advantage over the prior art, and it appears that applicant's invention would function equally as well with the support means taught by Tinker. Also, Tinker teaches the use of a broad range of measuring devices(see column 8, lines 44-46). Therefore, the exact type of measuring device used would have been obvious to one having ordinary skill in the art at the time the invention was made, so long as the surface of the workpiece is adequately measured, in order to achieve the desired final finish.

8. Claims 3-9,14, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tinker(6,301,009) in view of Kurogouchi(6,887,125).

a. Tinker is explained above. Tinker does not disclose at least one jet nozzle being able to dispense under pressure, a blasting agent for removing surface material through abrasive action, such that as a result thereof desired change in form and/or surface roughness is obtained. Kurogouchi discloses using at least one jet nozzle which is able to dispense under pressure, a blasting agent for removing surface material through abrasive action, such that as a result thereof desired change in form and/or surface roughness is obtained. See abstract, and figures

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1,2A, and 2B. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Tinker apparatus by replacing the working device therein with at least one jet nozzle being able to dispense under pressure, a blasting agent for removing surface material through abrasive action, such that as a result thereof desired change in form and/or surface roughness is obtained, as taught by Kurogouchi. Regarding claim 14, the working device may be provided with a series of blowing openings. See figures 2A and 2B.

b. Regarding claims 4,31, and 32, the exact pressure at which blasting occurs would have been obvious to one having ordinary skill in the art at the time the invention was made, since the pressure would depend upon the user preference.

c. Regarding claims 5,6, and 7, the exact type of holder used for holding the object would have been obvious to one having ordinary skill in the art at the time the invention was made, since clearly a partly translucent holder would allow for the light to pass therethrough so that information about the object may be obtained at numerous angles.

d. Regarding claims 8 and 9, in the apparatus as modified, a fluid jet polishing means is used. The shape of the object does not modify the structure of the apparatus.

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e. Regarding claim 33, the blasting agent is a mixture or suspension of a liquid and an abrasive agent. See column 7, lines 53-60.

f. Regarding claim 34, as modified, inherently the flow rate and/or pressure and/or outflow velocity and/or outflow profile can be actively controlled, depending on the measuring data registered by the measuring device.

#### **Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. The cited prior art discloses apparatuses for monitoring objects while work is being performed thereon.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy V. Eley whose telephone number is 571-272-4506. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer D. Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy V Eley/  
Primary Examiner, Art Unit 3724

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